

PRZEMLOCKI, K.

Waclaw Terlecki's Wychow materialu zarybieniowego sandaxza
What did the ancestors write about fish? P. 27
(Hatfing the Spawn of Pe ch); a book review. p. 24 GOSPODA KA RYBNA
Warszawa. Vol 7, No. 8, August 1955

SOURCE: East European Accessions List (EEAL) LC Vol 5, No. 3, March 1956

PRZEWLOCKI, P.

The art of self-control, emotional states and commanding; a pedagogic discourse.

P. 59 (WOJSKO LUDOWE) (Warszawa, Poland) No. 2, Feb. 1958

So: Monthly Index of East European Accessions (MEAI) LC Vol. 7, No. 5.
1958

*Radioactive characteristics of the Zechstein salt series in Kujawy. Kazimierz Przewlocki, Zdzisław Buja, Leopold Jurkiewicz, and Ryszard Potorski (Acad. Mining, Kraków). *Acta Geophys. Polon.* 4, 6-20 (1956) (in English). - The β -radiation of the salt beds at Inowrocław has been detd. by means of Geiger-Müller counters. The increased radioactivity is assocd. with local intercalations of K salts. An explanation of the origin of sylvinite veins is proposed.*

T. Steckel

POLAND/Cosmochemistry. Geochemistry. Hydrochemistry.

D

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81184.

Author : Przewlocki K.

Inst :

Title : A Method of Exploration of Petroleum by Means of
Radioactivity Measurements of Soils.

Orig Pub: Przegl. geol., 1958, 6, No 3, 132-134.

Abstract: Review of the investigations pertaining to theoretical aspects and actual practices of radioactive measurements applied to surface soils in the exploration for petroleum (basis USSR and US materials). It is recommended to employ this method in Poland. -- A. Yegorkin.

Card : 1/1

PRZEWORSKA, Dagna

Intranasal infection of white mice as a biological test
in diagnosis of pulmonary tuberculosis. Gruzlica 25 no.1:
1-8 Jan 57.

1. Z Zakładu Mikrobiologii Pomorskiej Akademii Medycznej
w Szczecinie Kierownik: doc. dr. W. Murczynska. Adres:
Szczecin, ul. Wyspińskiego 9/2.

(TUBERCULOSIS, PULMONARY, diag.

intranasal inject. of white mice with biol. test
on guinea pigs (Pol))

PRZEWORSKA-ROLEWICZ, D

Przeworska-Rolewicz, D. Sur un système d'équations
intégrales non-linéaires de seconde espèce à une infinité
de fonctions inconnues à singularité forte. Bull. Acad.
Polon. Sci. Cl. III. 5 (1957), 467-470, XXXIX. (Rus-
sian summary)

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1-FW

The author considers an infinite system of nonlinear
singular integral equations of the form

$$\varphi_n(t) = \int_L (t-\tau)^{-1} K_n(t, \tau, \varphi_1(\tau), \varphi_2(\tau), \dots) d\tau,$$

where $n=1, 2, \dots$ and L is a finite set of closed, disjoint,
planar curves with continuously turning tangent. The
existence of a unique solution is established by the use of
a fixed point theorem for continuous transformations in
a linear, locally convex, complete metric space [A. Tycho-
noff, Math. Ann. 111 (1935), 767-776]. The present paper
is a generalization of the work of A. I. Guseinov [Izv. Akad.
Nauk SSSR. Ser. Mat. 12 (1948), 193-212; MR 9, 443].

H. P. Thielman (Ames, Iowa).

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ell

PRZEWOSKI, Alfred

Diagnosis and treatment of acute traumatic diaphragmatic hernia.
Polski przegl. chir. 27 no.12:1233-1236 Dec 55.

1. Ze Szpitala Powiatowego im. Gromkowskiego w Rypinie. Dyrektor:
dr. F. Dłutek. Ordynator chirurgicznego oddziału: dr. A. Przewoski,
Rypin, ul. Mławska 24.

(HERNIA, DIAPHRAGMATIC
traum., diag. & ther.)

PRZEWOSNIAK, T.

STOIZMANN, Z.; MAGAS, S.; PIETZ, M.; PRZEWOSNIAK, T.; ZUBRZYCKI, Z.

Certain chemical changes in preserved blood. Poznan. Tow.
przyjaciol nauk. Wyzd. lek. 11 no.1:3-18 1954.

1. Z Zakladu Chemii Fizjologicznej A.M. w Poznaniu.
(BLOOD TRANSFUSION,

*preserved blood, chem. aspects)

BIELAWSKI, Włodzimierz; PRZEZDZIAK, Józefa

2 cases of acute carbon tetrachloride poisoning. Pol. tyg. lek.
20 no.10:362-363 8 Mr '65

1. Z I Kliniki Chorob Wewnętrznych AMG (Kierownik: prof. dr.
M. Gorski).

Thermodynamic properties of liquid metallic solutions
 11. Semiregular binary solutions. Janusz Troszowski
 and Emilia Przewalska (Akad. Med. Wrocław, Poland)
 Arch. Farmakol. 3, 315-27 (1958) (English summary); cf. C.A.
 53, 5833f. -- Regular soln. equations for the heat of mixing
 combined with an equation for the partial molar entropy of
 mixing, $S_i = -D \ln x_i$ ($i = 1, 2$) (where x_i is the mole frac-
 tion of the component "i," and D is independent of compn.)
 proposed by Chipman (C.A. 43, 4930d) to fit S_i in dil.
 metallic solus., are compared with exptl. data for 11 systems
 and in the whole concn. range. The adjusted D coeffs. are
 listed. A parallelism between D and excess vol. of mixing
 was found.
 J. Strekowski

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 4E20

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 PL

REIFER, I.; PRZEZDZIECKA, J.; KLECZKOWSKA, D.

Chromatographic method of quantitative determination of lupine alkaloids. Acta biochim. polon. 6 no.1:17-24 1959.

1. Katedra Biochemii Szkoły Głównej Gospodarstwa Wiejskiego i Zakład Biochemii. Roslin Instytutu Biochemii i Biofizyki PAN, Warszawa
Kierownik: prof. dr Ignacy Reifer.

(ALKALOIDS, determ.
chromatography of lupine alkaloids (Pol))

23303

P/038/60/005/003/001/002
A076/A126

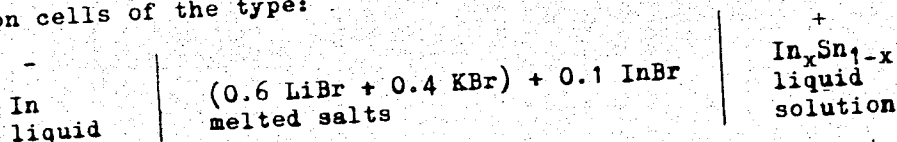
18.8100 1418 1138 1043

AUTHORS: Terpiłowski, Janusz, and Przeździecka-Mycielska, Emilia

TITLE: Thermodynamic properties of liquid-metal solutions - Part VI.
The In-Sn system

PERIODICAL: Archiwum Hutnictwa, v. 5, no. 3, 1960, 281 - 290

TEXT: In order to investigate the thermodynamic properties of the liquid In-Sn solutions the results of measurements of the electromotive forces - emf - were applied. These forces were measured in reversible concentration cells of the type:



The authors investigated 10 liquid In-Sn solutions with an In content from 5 to 90 atomic %. The design of the electrolytic cell was the same as in the previous works of this series (Ref. 5: Terpiłowski, J. "Archiwum Hut-

Card 1/3

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A076/A126

Thermodynamic properties of liquid-metal...

nictwa", no. 4, 1959, p. 355). The emf of the cell were measured in a temperature range of from 390 to 610°C and the values of the emf were determined at 400°C (E_{400}), 500°C (E_{500}), and 600°C (E_{600}) as the temperature coefficients of emf ($\frac{dE}{dT}$) in the above range of the temperatures concerned.

Based on the results of these measurements and the Gibbs-Duhem equation the following calculations were performed: a) activities (a_{In} , a_{Sn}) and the activity coefficients (f_{In} , f_{Sn}) of the constituents, b) changes of the partial molal thermodynamic potentials (ΔG_{In} , ΔG_{Sn}), entropy (ΔS_{In} , ΔS_{Sn}) and enthalpy (ΔH_{In} , ΔH_{Sn}) of indium and tin, c) changes of the thermodynamic potential (ΔG), entropy (ΔS) and enthalpy (ΔH) during the mixing of pure liquid metals into liquid solutions. It was stated that the enthalpy of mixing shows negative values in the whole concentration range and attains -40 cal/gramatom for liquid alloys containing from about 72 to 82 at.% of indium. The small values of the enthalpy of mixing and the values of the activity coefficients for indium and tin, which approach unity, prove that the constituents influence each other very little in the temperature range of the measurements. The ΔG curve has its extremity displaced towards high-

Card 2/3

Thermodynamic properties of liquid-metal...

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A076/A126

er concentrations of indium in the liquid solutions likewise the ΔH curve. The activity isotherm for tin is distinguished by positive-negative deviations from the Raoult's law and that of the activity for indium by negative ones. It is possible that such a course of these thermodynamic curves is in relation with the appearance of the solid phase β of a variable composition in the In-Sn system. The values of ΔS_{In} , ΔS_{Sn} and ΔS in the temperature range of measurements are not much higher than those for regular solutions. This results probably from the fact that both of these metals are close to each other in the periodic system. There are 4 tables, 4 figures and 20 references: 12 Soviet-bloc and 8 non-Soviet-bloc. The reference to the most recent English-language publication reads as follows: Kubaschewski, O., Catterall, J. A., Thermochemical Data of Alloys, London - New York, 1956.

ASSOCIATION: Katedra Chemii Nieorganicznej, Wydział Farmaceutyczny Akademia Medyczna, Wrocław (Department of Inorganic Chemistry, Pharmaceutical Section, Medical Academy, Wrocław)



Cobd 3/3

PRZEZDZIECKA-MYCIELSKA, Emilia; TERPILOWSKI, Janusz; STROZECKA,
Krystyna

Thermodynamic properties of liquid metallic solutions. Pt.

9. Archiw hutn 8 no. 2: 85-102 '63.

1. Katedra Chemii Nieorganicznej, Wydział Farmaceutyczny,
Akademia Medyczna, Wrocław.

PRZYZDZIECKI, S.

SURNAME (in caps); Given Names

Country: Poland

Academic Degrees: Not stated

Affiliation: Department of Communication Theory, Institute of Fundamental Technical Problems, Polish Academy of Sciences
(Zakład Teorii Łączności, Instytut Podstawowych Problemów Techniki PAN)

Source: Warsaw, Bulletin de l'Académie ^{Polonaise} des Sciences, Série des Sciences Techniques, Vol 9, No 3, Mar 61, pp 175-178.

Data: "TE and TM Fields in Cartesian Co-ordinate System."

PRZEZDZIECKI, S.

TE and TM fields in cartesian coordinate system. Bul Ac Pol tech 9
no.3:175-178 '61.

1. Communication Theory Department, Institute of Fundamental Technical
Problems, Polish Academy of Sciences. Presented by P. Szulkin.

PRZEZDZIECKI, S.

TE and TM fields in orthogonal co-ordinate systems. Bul Ac Pol Tech
8 no.8:429-436 '60. (EEAI 10:6)

1. Communication Theory Department, Institute of Basic Technical
Problems, Polish Academy of Sciences. Presented by P.Szulkin.
(Electromagnetic waves)

FRZYSZCZYŃSKI, STANISŁAW.

Lampowe układy kształtujące. [Wyd. 1.] Warszawa, Poland [Państwowe Wydawn.
Naukowe] 1959. 154 p. (Zasady radiolokacji, zesz. 2)

Monthly list of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb. 1960

Uncl.

SADOWSKI, Janusz; PRZEZDZISLO, Zdzislaw

Effect of ACTH on the level of neutral 17-ketosteroids in the urine
in postratum insufficiency of the anterior pituitary. Endokr. pol.
14 no.5:431-438 '63.

1. I Klinika Poloznictwa i Chorob Kobietych A.M. w Warszawie. Kierow-
nik: prof. dr T. Bulski.

PASZKO, Zygmunt; PRZEZDZIECKI, Zdzisław

Usefulness of enzymes from the gastrointestinal system in a snail in determining steroid esters. Postepy hig. med. ~~dosw.~~ 17 no.3:361-367 '63.

1. Z Zakladu Biologii Nowotworow Instytutu Onkologii im. M. Sklodowskiej-Curie w Warszawie Dyrektor Instytutu: prof. dr J. Laskowski Kierownik Zakladu: prof. dr K. Dux.
(SNAILS) (GLUCURONIDASE) (STEROIDS)
(ESTERASES)

POLAND

PASZKO, Zygmunt and PRZEZDZIECKI, Zdzislaw, Department of Neoplasm Biology (Zaklad Biologii Nowotworow) (Director: Prof. Dr. K. DUX) of the Oncology Institute (Instytut Onkologii) im. M. Sklodowskiej-Curie in Warsaw (Director: Prof. Dr. J. LASKOWSKI)

"Enzymes of Alimentary Tract of Domestic Snail for Determination of Steroid Esters."

Warsaw, Postepy Higieny i Medycyny Doswiadczalnej, Vol 17, No 3, 63, pp 361-367.

Abstract: The authors have successfully obtained preparations of beta-glucuronidase and sulfatase from the alimentary juices of the "winniczek" snail [genus helicidae], abundant in Polish forests throughout most of the year. They describe the preparation and properties, including optimum dilutions and pH, and comment on their durability. These preparations can now replace the expensive importation of the above enzymes, used in investigations of steroid esters. All 20 references are Western.

- END -

1/1

1588, 2473

CSO: 2000-N

— 19 —

ORESHKO, V.F. [deceased]; BERDNIKOV, A.I.; PRZHBYL'SKIY, V.V.

Sorption of radioactive cobalt by peats. Radiokhimiya
4 no.4:499-502 '62. (MIRA 15:11)
(Cobalt—Isotopes)
(Sorption) (Peat)

PRZHEGORLINSKIY, D.F., inzh.

Calculating the reactive electric energy in single-phase circuits.
Prom.energ. 15 no.3:34-35 Mr '60. (MIRA 13:6)
(Electric measurements)

PRZHEBOROVSKIY, Ya. S.																									
Activity of sulfuric acid in mixed solvents. Ya. S. Przhembovskiy, V. G. Georgiyevskiy and N. D. Filipova. <i>J. Russ. Phys. Chem. Soc.</i> 62, 313 (1930). See C. A. 24, 1785.																									
S. I. MAIDORSKY																									

Activity of sulfuric acid in mixed solvents. Ya. S. Przhembovskiy, V. G. Georgiyevskiy and N. D. Filipova. *J. Russ. Phys. Chem. Soc.* 62, 313 (1930). See C. A. 24, 1785.

S. I. MAIDORSKY

U.S.S.R. METALLURGICAL LITERATURE CLASSIFICATION

PRZHEBOROVSKIY, Ya. S.

A method of simultaneous determination on one sample of the volume and the weight coefficients of swelling of gels. Ya. S. Przheborovskiy and V. K. Tikh. (1st Med. Inst., Moscow). *Kolloid. Zhur.* 16, 301-3 (1954). — A swollen gel is weighed in 2 inert liquids having d_1 and d_2 . If the apparent wts. are p_1 and p_2 , resp., the vol. of the gel is $(p_1 - p_2)/(d_2 - d_1)$ and the wt. of the gel *in vacuo* is $(p_1 d_2 - p_2 d_1)/(d_2 - d_1)$. The method is tested for agar and beans in H_2O and rubber in toluene; the inert liquids are not specified.

I. J. B.

PRZHEBYL'SKIY, M. I.,

449. Adsorption properties of white carbon black. G. A. BLOKH, I. E. NEMARK, P. I. BALASHKIN, and M. I. PRZHEBYL'SKIY. *Khim. Prom.*, 1953, No. 7, 17-9; *Ref. Zhur. Khim.*, 1956, abn. 33906. When using these fillers for the same mix and same manufacturing technique there is sometimes found undervulcanisation and sometimes a slowing-down of vulcanisation. The difference in behaviour depends upon the peculiarities of structure of the particles, their hydrophilic and adsorption properties. Different specimens adsorb accelerator differently, the fine-pore ones adsorbing less. Their technical behaviour may be characterised by their capacity for absorbing moisture. 42183-R

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PRZHEBYL'SKIY, M. I.

"Migration and uniform distribution of α sulfur in rubber mixes. G. A. BLOKH,
V. Ya. DEMIDIONOVA, G. P. MIKLUKHIN, I. I. KUKHTENKO, A. F. REKASHEVA, R. V. NIKULINA,
and M. I. PRZHEBYL'SKIY Legkaya Prop. 15, No 1, 28-30 1955

Study was with labled atoms. After 4-6 passes through a narrow gap between
rolls, S was distributed evenly. During short contact of a raw mix with a fabric at
room temp. there was migration of S. There was also migration from vulcanized rubber
into tje raw mix. During vulcanization, migration into the fabric layer was not stopped
by talc; a paper layer reduced migration,

B. Z. KAMICH

USSR, Chemistry - Rubber

FD-2734

Card 1/1 Pub. 50 - 15/20

Authors : Lirner, S. M., Chizhik, M. V., Przhebyl'skiy, M. I.

Title : Pressure molding of compounded rubber with the aid of a worm screw feeder

Periodical : Khim. prom. No 5, 300, Jul-Aug 1955

Abstract : The design and operation of a device by means of which compounded rubber is fed into a mold are described. Pressure on the rubber is exerted by means of a worm screw which extrudes the rubber from the feeder into the mold. One figure.

PRZHEBYL'SKIY, M.I.; PAL'TSEVICH, Z.A.; NEYMARK, I.Ye.

Plant installation for gasoline recovery. Kauch.i rez. 16 no.5:32-34
My 57. (MLRA 10:7)

1. Kiyevskiy zavod "Krasnyy rezinshchik" i Institut fizicheskoy
khimii Akademii nauk USSR.

(Gasoline) (Rubber industry--Equipment and supplies)

67634

SOV/81-59-14-51894

15.9130

Translation from: Referativnyy zhurnal, Khimiya, 1959, Nr 14, p 556 (USSR)

AUTHORS: Blokh, G.A., Borisova, G.S., Burmistrov, S.I., Przhnebylskiy, M.I.

TITLE: Technological Investigations of Some Organic Compounds as Accelerators for the Vulcanization of Dipped Products

PERIODICAL: Tr. Dnepropetr. khim.-tekhnol. in-t, 1958, Nr 6, pp 166 - 173

ABSTRACT: The action of the following compounds as accelerators of the process of sulfur vulcanization at 100 - 120°C was investigated: trithiane $\text{CH}_2\text{SCH}_2\text{SCH}_2\text{S}$ (I), triisopentoxythiophosphate $[(\text{C}_2\text{H}_5)_2\text{CHO}]_3\text{P}=\text{S}$ (II), diethoxydithiophosphoric acid $(\text{C}_2\text{H}_5\text{O})_2\text{P}(\text{S})\text{SH}$ (III), and its salts (IV), the diethyl ester of the 2-ethylmercaptoethanethiophosphoric acid $(\text{C}_2\text{H}_5\text{O})_2\text{P}(\text{S})\text{CH}_2\text{CH}_2\text{SC}_2\text{H}_5$ (V), dibenzylthiourea $(\text{C}_6\text{H}_5\text{CH}_2\text{NH})_2\text{CS}$ (VI), the benzthiazole ester of the diethyldithiocarbamic acid (VII), benzylammonium dithiocarbamate $\text{C}_6\text{H}_5\text{CH}_2\text{NHC}(\text{S})\text{SHNH}_2\text{CH}_2\text{C}_6\text{H}_5$ (VIII), hexamethyleneimine hexamethylenedithiocarbamate $(\text{CH}_2)_6\text{HC}(\text{S})\text{SN}\cdot\text{NH}(\text{CH}_2)_6$ (IX). The compounds I-VI and VIII have no accelerating action. VII produces opaque films with good physical-chemical properties, IX is an accelerator which has been introduced

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SOV/81-59-14-51894

Technological Investigations of Some Organic Compounds as Accelerators for the Vulcanization of Dipped Products

into production and shows transparent highly-stable films. The films were obtained by dipping into a standard glue with S and later on into a glue with the accelerator or into a toluene solution of the accelerator. The glue with IX is stable on storing for two weeks. Analogous results were obtained also in press vulcanization.

V. Kuleznev

Card 2/2

PRZHEBYL'SKIY M. I.
AUTHOR: Przhebyl'skiy, M. I.

62B-2-7/8

TITLE: International Symposium for Macromolecular Chemistry.
(Mezhdunarodnyy simpozium po makromolekulyarnoy khimii).

PERIODICAL: Kauchuk i Rezina, 1958, ¹Nr.2. pp. 34-35. (USSR).

ABSTRACT: This symposium was held in Prague (Czechoslovakia) from the 9th to 15th September, 1957, and organised by the Czechoslovakian Academy of Science during the Conference for Pure and Applied Chemistry. This symposium was reported in a special issue of the "Journal of Polymer Science", 1957.

AVAILABLE: Library of Congress.

Card 1/1 1. Chemistry-U. S. S. R.

PAL'TSEVICH Z.A.; PRZHEBYL'SKIY, M.I.; CHUGAY, A.D.

Manufacture of gloves from poly(vinyl chloride) pastes. Plast.massy
no.10:36-38 '61. (MIRA 15:1)

(Gloves) (Plastic)

FAYDYSH, A.N.; CHECHIK, L.Ye.; CHUGAY, A.D.; PRZHEBYL'SKIY, M.I.

Control of the degree of vulcanization of rubbers with the aid of
an instrument for luminescence analysis. Kauch.i rez. 20 no.5:
50-53 My '61. (MIRA 14:5)

1. Kiyevskiy zavod "Krasnyy rezinshchik."
(Vulcanization) (Luminescence)

S/138/60/000/008/009/015
A051/A029

AUTHORS: Przhebyl'skiy, M.I.; Chugay, A.D.; Chechik, I.Ye.

TITLE: Static Electricity in Rubber Manufacturing

PERIODICAL: Kauchuk i Rezina, No. 8, 1960, pp. 50 - 54

TEXT: Static electricity is obstacle in production and a cause for faulty material, fires and explosions. It appears easily in rubber production, especially in manufacturing rubber glues and rubberized fabrics (Refs. 1 - 4). In the presence of the various organic solvents, dust particles, powders of rubber mixtures, etc., this can be particularly dangerous. An electrostatic discharge can be detrimental to a tire's performance (Ref. 10). G.S. Kryshchak, G.A. Spynu and V.A. Reshetnikov of the Institut Avtomatiki Gosplana UkrSSR (Institute of Automation of the UkrSSR State Plan) and the Laboratories of the "Krasnyy Rezinshchik" Plant developed an instrument for the measurement of the magnitude and sign of static electricity discharges. A compensation device is included in the instrument to protect it against changing conditions, such as those due to oxidation and dirt clogging the system. The aging of the tubes is checked periodically with a calibrating disk. Various magnitudes of discharges are measured by a divider (a

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Static Electricity in Rubber Manufacturing

S/138/60/000/008/009/015
AC51/A029

scale switch) and the maximum magnitude which can be measured is 100 kv/cm. The accuracy of the measurements and reproducibility of the results is $\pm 2\%$. The instrument was used in measuring the static electricity of different rubbers during the production process. It is noted that most rubbers have a negative charge, the highest being in smoked sheets. It is pointed out that the charge can change both in magnitude and in sign during transportation of the rubber, storage and when subjected to different mechanical stresses or particularly during mastication (Fig. 4). A similar overcharge is characteristic for natural rubber during the rolling process (Fig. 5). Carbon black mixtures have no charge at any time during the rolling process. Rubber glue mixtures which are used in manufacturing thin-walled dipped articles were found to have no charge. High charges were noted in rubberizing cable fibers. The change in the rubber charge during deformation was also recorded using the described instrument. When expanded by 200%, the charge drops almost to zero in articles with an initial charge. When the article reverts back to its original dimensions independently, the charge increases abruptly and usually exceeds the initial value. It is stated that this electric elastic effect is maintained in all rubber articles, such as heating pads, plates, etc. As a result of the investigations carried out by the authors, it was established that the greatest hazard from static electricity, i.e., of explosions, was found in the pro-

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A051/A029

Static Electricity in Rubber Manufacturing

duction of rubber glues, in the mixers and when rubberizing fabrics, due to the high electrostatic charges and the presence of explosive concentrations of gasoline. Various radio-active sources are recommended (Ref. 11) for combating this hazard by removing the static charges. The Soviet industry has not as yet produced reliable radio-active substances for this purpose. The manufacture of rubber glues is being carried out in an atmosphere of inert gases in the mixers, which eliminates the dangers of fire. There are 6 figures and 11 references: 8 Soviet, 3 English.

ASSOCIATION: Kiyevskiy zavod "Krasnyy Rezinshchik" (Kiyev Plant "Krasnyy Rezinshchik")

Card 3/4

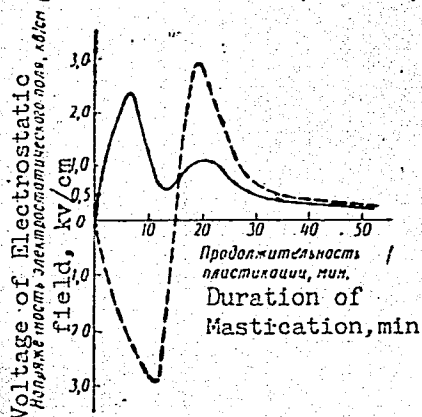
Static Electricity in Rubber Manufacturing

S/138/60/000/008/009/015

A051/A029

Figure 4:

Cases of the Changes in the Voltage of the Electrostatic field of Natural Rubber During Its Mastication (2 Cases).

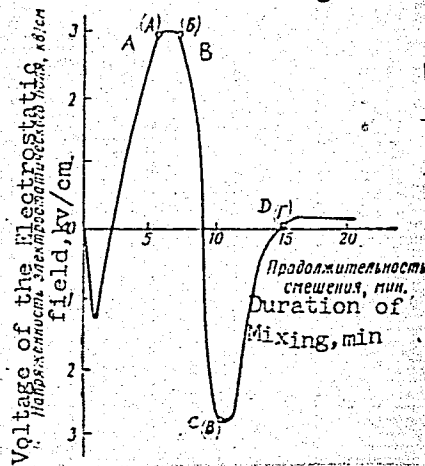


A-introduction of stearin into natural rubber; B-introduction of captax; C-introduction of zinc white; D-introduction of sulfur.

Card 4/4

Figure 5:

Change in the Voltage of the Electrostatic field of a Standard Mixture Based on Natural Rubber During Its Preparation on Rollers:



BRZHEVSKY, D. I.

PLATE I BOOK EXHIBITION

507/1073

Sbornik nauchnykh i literaturnykh statii, 1959
Nash lyubitel nauki: Materialy k spetsializatsionnoy konferentsii po
teme "Luchevaya analiza". Materialy konferentsii. Minsk, Izdat-
vo BSSR, 1959. 147 p. 1,000 copies printed.

Sponsoring Agency: Akademiya nauk Belorusskoy SSR. Institut fiziki.

General Ed.: M. A. Bortsevich; Ed.: L. Timofeyev; Tech. Ed.:
B. Siderov.

PURPOSE: This collection of articles is intended for chemists and phy-
sicians interested in molecular luminescence, and for scientific per-
sonnel concerned with applications of this and related phenomena in
research in the life sciences.

COMPARIS: The collection contains 26 papers read at the Eighth Con-
ference on Luminescence, which took place 19-24 October, 1959 (place
of conference not given). These papers are concerned principally
with the development of new luminescence methods for quantitative
and qualitative chemical analysis, and with the applications of lumi-
nescence in medical and biological research. They discuss lumines-
cence methods for the detection of uranium, mercury, magnesium,
aluminum, boron, and other elements, as well as luminescence methods
for the diagnosis of skin cancer and the detection of gill-type virus
in the blood of fish. The structural design of new in-
struments for luminescence analysis is described. The conference
was not concerned with studies on the phosphorescence of organic
compounds. There is a discussion of the contributions of Soviet
specialists in molecular luminescence in the course of the 1959
half preceding the conference. The articles of V. K. Mayevskiy
(p. 75) and of V. V. Pavlovskiy (p. 77) have been translated because
of their importance. No periodicals are mentioned. References
accompany most of the articles.

Translator: M. M. Luminescence Method and Device for the
Analysis of Vapor-Oil Emulsions

87

Pyzhov, A. S., L. V. Dvornik, A. B. Chumak, and
M. A. Pribludnyy. (Izdat. Khimicheskoye, Moscow, 1959).
Mikroskopicheskaya analiza. (Izdat. Khimicheskoye, Moscow, 1959).
Plast. Vozdukh. (Izdat. Khimicheskoye, Moscow, 1959).
Luminescence Analysis of Rubbers

90

Belikov, M. I. (Trakhtenbergskiy nauchno-issledovatel'skiy
Institut laboratoriy promyshlennosti (Trakhtenbergskiy
Nauchnyy Institut of the Cable Industry)). Investiga-
tion by the Luminescence Method of the Diffusion of
Liquids in Rubbers

96

Prokhorov, V. N., and Y. D. Zolotarev. (Trakhten-
bergskiy Nauchnyy Institut promyshlennosti (Trakhtenbergskiy
Nauchnyy Institut of the Cable Industry)). Scientific Research
Institute of Rubber and Plastics. (Izdat. Khimicheskoye, Moscow, 1959).
Luminescence Properties of Infrared and Rubbers Made from
Natural Rubber

98

Brumbar, I. M., M. S. Mayevskiy, and A. V. Gorkina
(Institut biologicheskoy fiziki Akad. Nauk SSSR (Institute of
Biological Physics AS USSR)). Luminescent Microscopy
of Living Organs

103

Asanidi, Y. D. (Kharkovskiy gosudarstvennyy
meditsinskiy Institut (Kharkov State Medical Institute)).
Luminescence Microscopic Analysis of Skin Cancer

107

Kozlovskiy, A. P., and E. M. Iskhakovich. Study by the
Luminescence Microscopy Method of the Morphology of Certain
Spore-forming and Asporogenous Bacteria

111

Brumbar, I. M., I. (Institut fiziki Akad. Nauk SSSR (Institute
of Physics of the Academy of Medical Sciences of the USSR)).
Experimental Use of Luminescence Microscopy in Neurology

116

PRZHEBYL'SKIY, M.I.; CHUGAY, A.D.; CHECHIK, L.Ye.

Static electricity in the production of rubber. *Kauch. i rez.* 19
no.8:50-54 *Ag* '60. (*MIRA* 13:9)

1. Kiyevskiy zavod "Krasnyy Rezinshechik".
(Rubber industry--Equipment and supplies) (Electrostatics)

PRZHEBYL'SKIY, M.I., rabotnik; CHUGAY, A.D., rabotnik; CHECHIK, L.Ye.,
rabotnik; POLYANINOVA, N.A., rabotnik; DIZIK, V.Yu., rabotnik

New production control methods at the "Krasnyi Rezinshchik" Plant.
Zav.lab. 26 no.9:1154-1155 '60. (MIRA 13:9)

1. Zavod "Krasnyy rezinshchik".
(Kiev--Rubber goods)
(Testing laboratories)

FAYDYSH, A.N.; CHECHIK, L.Ye.; CHUGAY, A.D.; PRZHEBYL'SKIY, M.I.

Photoelectric method of measuring the diameter of rubber threads.
Kauch.i rez. 19 no.5:52-54 My '60. (MIRA 13:7)

1. Kiyevskiy zavod "Krasnyy rezinshchik" i Kiyevskiy gosudarstvennyy
universitet im. T.G.Shevchenko.
(Kiev--Rubber) (Kiev--Measuring instruments)

S/138/60/000/005/011/012
A051/A029

AUTHORS: Faydysh A.N., Chechik, L.Ye., Chugay, A.D., Przhebyl'skiy, M.I.

TITLE: The Photoelectric Method for Measuring the Diameter of Rubber
Fibers ✓

PERIODICAL: Kauchuk i Rezina, 1960, No. 5, pp. 52 - 54

TEXT: The production of extruded rubber fibers with a circular cross section has been introduced at the Kiyev "Krasnyy Rezinshzhik" Plant. Since the uniformity of the diameter of fibers along their entire length (with a deviation of the diameter not exceeding ± 0.03 mm) is imperative for durability and strength, the measuring procedure of the diameter is of great importance. Until recently the diameter was measured with the TWP-1 (TIR-1) micrometer thickness gage. The disadvantages of this instrument are pointed out. The fiber locked between two measuring platforms in this apparatus is deformed reducing its diameter by 0.05 - 0.08 mm distorting the results of the measurements. The readings on this apparatus also depend on the position of the fiber on the lower platform. Finally, no

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S/138/60/000/005/011/012
A051/A029

The Photoelectric Method for Measuring the Diameter of Rubber Fibers

measurement of the ovalness of the fiber can be made here. The attempt to use the M5-1 (MB-1) microscope also met with failure and also the dioscope is unsuitable according to the authors. Lapetov's method performed by measuring the average size of the area of the cross section determined from the weight of a given number of fibers of given length, is only applicable to the average diameter of a series of fibers and cannot be used for single fibers. The authors have developed the photoelectric method which enables one to check the oval shape and the thickness of the fiber according to its length with an accuracy of 0.01 mm. The general view of the ФЭИД-1 (FEID-1) photoelectric instrument is shown in Figure 1 and the working diagram in Figure 2. The main part is the differential ФЭССУ-10 (FES SU-10) sulfur-silver photoelement. It consists of two independently functioning halves. The measured fiber is placed into a carriage. A complete description of the instrument is given in addition to its functioning principle. The FEID-1 photoelectrometer has been installed at the "Krasnyy Rezinshzhik" Plant. In comparing the measurements of the TIR-1 and that of the FEID-1 instruments, it was found that the readings of the TIR-1 were less by 0.05 to 0.09 mm, which means an overexpenditure of rubber mixtures

Card 2/3

S/032/60/026/009/016/018
B015/B058

AUTHORS: Przhebyl'skiy, M. I., Chugay, A. D., Chechik, L. Ye.,
Polyaninova, N. A., Dizik, V. Yu., Laborers

TITLE: New Control Methods at the zavod "Krasnyy rezinshchik"
("Krasnyy rezinshchik" Plant)

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 9,
pp. 1154 - 1155

TEXT: Some new control methods for technological processes and finished-
products of the rubber industry are described. They were elaborated at
the laboratory of the Kiyevskiy zavod "Krasnyy rezinshchik" (Kiyev
"Krasnyy rezinshchik" Plant) jointly with workers of the institutes. A
photoelectric instrument with an ϕ CCY-10 (FESSU-10) photoelement is used
for determining the rubber-thread diameter, instead of the TWP-1 (TIR-1) ¹⁵
micrometer thickness gauge used hitherto. An instrument for measuring
the electrostatic charges on the surface of finished and semifinished
products was designed jointly with the Institut avtomatiki Gosplana USSR
(Institute of Automation of the Gosplan of the UkrSSR) under the direction

Card 1/3

New Control Methods at the zavod "Krasnyy rezinshchik" ("Krasnyy rezinshchik" Plant) S/032/60/026/009/016/018
BO15/BO58

of G. S. Krashtab. The instrument consists of 3 parts, i.e., the test head, the electronic part with the potentiometer of the electrostatic field and the current source. The test head contains 2 electrode systems, one for measuring the charge and the other for measuring the digit sign of the charge. Measurements showed that the majority of rubber types and loose admixtures possess a negative or positive charge even before treatment. The charge of the rubber changes markedly during plastification. A portable, inertialess measuring instrument of the type NT-1 (IT-1) was designed under the direction of L. V. Sveshnikov jointly with the Kiyevskiy politekhnicheskii institut (Kiyev Polytechnic Institute) for measuring the press-plate temperature of vulcanizing presses in the measuring range of from 100° to 200°C. The measuring circuit represents an unbalanced d.c. bridge with a millivoltmeter as indicator. The refractometric method is used instead of the gravimetric one for determining the concentration of rubber adhesives and synthetic latex, an P,П (RL) refractometer-saccharometer and an OM-7 (OI-7) electric lamp being used. A photoelectric instrument for the luminescence analysis of rubber was designed jointly with collaborators of the kafedra eksperimental'noy fiziki Kiyevskogo universiteta (Chair of Experimental Physics of Kiyev

Card 2/3

New Control Methods at the zavod "Krasnyy rezinshchik" ("Krasnyy rezinshchik" Plant) S/032/60/026/009/016/018
B015/B058

University) under the direction of A. N. Faydysh. It consists of 4 units: an Hg-quartz lamp, an optical chamber, an $\phi Y-17$ (FEU-17) photomultiplier with amplifier and microammeter, as well as the current source of the photomultiplier.

ASSOCIATION: Zavod "Krasnyy rezinshchik" ("Krasnyy rezinshchik" Plant)

Card 3/3

BALABKIN, P.I.; BLOKH, G.A.; BORISOVA, T.S.; BURMISTROV, S.I.;
PRZHEBYL'SKIY, M.I.; FEDORINA, Zh.A.; CHURAY, A.D.

Organic accelerators for the continuous vulcanization of
dipped goods. Kauch.i rez. 19 no.1:48-51 Ja '60.
(MIRA 13:5)

1. Kiyevskiy zavod "Krasnyy resinechik" i Dnepropetrovskiy
khimiko-tekhnologicheskii institut.
(Rubber goods) (Vulcanization)

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15. 9/30

10/23/93

Salabkin, P. I., Elkh, G. A., Belyayev, E. S.,

Przemyśl, kawy M.T., Poznań, Gdansk, Gdynia, Sopot

TITLE: Organic Accelerators for Continuous Vulcanization of Dispersed Rubber Goods

PERIODICAL: Kauchuk i Rezina, 1960, No. 1, pp. 48-51

[illegible]

Card: 1A

rubber mixture had the following composition (weight parts): natural rubber 100, zinc oxide 5, zinc stearate 5, and 0.5 phthalic acid of low m.p. The results of the physicochemical tests are given in Table I. The results obtained on the base of a standard rubber compound with the same composition are given in Table II. The results of the tests of the solubility of some of diallyl-dithio-carbamic acids are shown in Table 3. As can be seen the synthesized acids of the diallyl-dithio-carbamic acids are effective accelerators for vulcanization of dipped articles in an air medium. Optimum vulcanization is achieved in such less time as compared with control compounds. Experiments have revealed the possibility of vulcanizing dipped articles in an atmosphere of hot air of 100-150°C. with the use of the following compounds: diallyl-dithio-carbamate of diethyleneamine, diallyl-dithio-carbamate of triethyleneamine, diallyl-dithio-carbamate of tetraethyleneamine, diallyl-dithio-carbamate of di- α -naphthylamine, diallyl-dithio-carbamate of hexamethyleneamine. The solubility of these compounds in various solvents is given in Table IV.

Card 2/3

in gasoline permits individual dipping of articles in sulfurous acid in order to be carried out, as well as the continuous vulcanization of articles. There are 3 tables and 1 reference.

ASSOCIATIONS: Kiyevskiy zavod "Krasnyy rezinstshik" (Kiev Plant: "Red Rubber Workers") Dnepropetrovskiy khimiko-tekhnologicheskii institut (Dnepropetrovsk Chemical Technological Institute)

Page 3/3

PRZHEZDETSKAYA, I.K. (Kuybyshev (obl.), ul. Pobedy, 12, kv. 93)

Veins of the foot bones in man. Arkh.anat.gist.i embr. 38 no.2:
52-60 F '60. (MIRA 14:6)

1. Kafedra normal'noy anatomii (zav. - prof. F.P.Markizov) Kuybyshev-
skogo meditsinskogo instituta.
(FOOT--BLOOD SUPPLY) (BONES--BLOOD SUPPLY)

PRZHEGORLINSKIY, D.F., inzh.; DANILIN, I.T., inzh.

Amplidyne transfer to a reduced rate. Stal' 23 no.12:1094 D '63.
(MIRA 17:2)

1. Yugenergochermet i Volgogradskiy metallurgicheskiy zavod "Krasnyy
Oktyabr'".

PRZHEGORLINSKIY, D.F.

Experience of adjusting a phase compensator for an asynchronous
motor. Prom. energ. 15 no.11 N °60. (MIRA 14:9)
(Electric motors, Induction)

1. PRZHEGORLINSKIY, V. I.

2. USSR (600)

4. Melons

7. Drying muskmelons. Sad i og. No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

USSR/Cultivated Plants. Grains.

11

Abs Jour : Ref Zhur-Biol., No 15, 1953, 68116

Author : Przhgorlinskiy, V. I.

Inst : ~~Poltava Agricultural Institute.~~

Title : The Influence of Fertilizers on Corn Yields
in Poltava Oblast'.

Orig Pub : Nauchn. tr. Poltavsk. s.-kh. in-t, 1956
(1957), 5, 25-36

Abstract : The results are given of experiments conducted
between 1953 and 1956 on field rotations of
wooded-steppe argillaceous soils which have
been under cultivation for a long time; a
study has been made of the influence of va-
rious types, forms, and dosages of basic fer-
tilization applied both before and during

Card : 1/3

USSR/Cultivated Plants. Grains.

11

Abs Jour : Ref Zhur-Biol., No 15, 1953, 63116

sowing, on the grain yields of Khar'kovskaya 23 and Dnepropetrovskaya. The corn reacts intensively to application of organic and mineral fertilizers. The best results are obtained when manure is applied together with mineral fertilizers; as a basic treatment, mineral fertilizers are slightly inferior to manure. Granular superphosphate mixed with humus is more effective than the powdered variety when it is applied with the second spring cultivation, but it is inferior to it when applied to the autumnal pre-sowing cultivation. Factory produced granular superphosphate is not very effective when it is used with autumnal plowing and cultivation. The organic and mineral mixture recommended

Card : 2/3

USSR/Cultivated Plants. Grains.

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68116

by VASKhNIL [ALL-Union Academy of Agriculture
inemi Lenin] gave a significant increase in
yields. Bacterialization of the seed with
nitrogen and phosphorobacterin gave a yield
increase of 5-6 centners/hectare. -- Ye. I.
Saks

Card : 3/3

1-4

USSR/Cultivated Plants - Grains.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39226

Author : Przhegorlinskiy, V.I.

Inst : Poltava Agricultural Institute.

Title : The Effectiveness of Fertilizer Applied to Clusters of Corn.

Orig Pub : Nauchn. tr. Poltavsk. s.-M. in-ta, 1956 (1957), 5, 37-40.

Abstract : The results of the study of the influence of various kinds of fertilizers and ways to introduce them in corn fields are given in this paper. A pre-sowing introduction of fertilizer both into the bunches of seeds and next to them increased the yield by 3.4 - 3.9 cwt/ha. The highest yields were obtained by introducing the fertilizer next to the cluster. The highest increase over the standard yield was obtained by utilizing granulated P₂O₅ with humus and

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Przhemistkiy, V.I.

4-6-13/30

AUTHOR: Shchedrov V.S., Doctor of Technical Sciences, Professor, and
Przhemistkiy, V.I.

TITLE: Demons of Time (Demony vremeni)

PERIODICAL: Znaniye - Sila, 1957, # 6, pp 20 - 26 (USSR)

ABSTRACT: The article deals with anti-gravity research in America. At the Institute of Perspective Research of Princeton University, new small particles causing gravitation, called gravitons, were discovered among the products of split nuclei. On the basis of this discovery it might be possible to design new engines by transferring gravitons or, as proposed by the Fund of Gravitation Research by applying a gravity absorber. Canadian scientists are also endeavouring to utilize such an absorber for aviation.

Finally the authors touch new trends in science - electro-gravity- and mention researches conducted in this field by Gerardin, a French physicist and Townsend T. Brown, an American scientist, who established connections between electricity magnetism and gravity through magnetic coils and condensers.

The authors conclude that the reviewed information may conceal enormous research in the field of electro-gravity.

Card 1/2

Demons of Time

4-6-13/30

There are 6 sketches.

AVAILABLE: Library of Congress

Card 2/2

PRZHEROVSKIY, K. [Prerovsky, K], prof. (Praga)

Survey of the work of the Czechoslovak Research Institute of
Physiatrics, Balneology and Climatology for 1959-1961. Vop.
kur., fizioter. i lech. fiz. kul't. 27 no.4:372-374 J1-Ag'62
(MIRA 16:11)

Problems of health resorts and physiotherapy at the Czechoslo-
vak Congress of Rheumatologists. Ibid.:374-375

1. Direktor Chekhoslovatskogo issledovatel'skogo instituta
fiziatrii, bal'neologii i klimatologii.

PRZHESETSKIY, A.P. [Przhesets'kyi, A.P.]

"Quaternary deposits in the Ukrainian S.S.R." by P.K. Zamorii.
Reviewed by A.P. Przhesets'kyi. Geol. zhur. 17 no.4:82-84 '57.
(MIRA 11:4)

(Ukraine--Geology, Stratigraphic)
(Zamorii, P.K.)

PRZESMYCKI, Feliks; DOBROWOLSKA, Halina; OLAKOWSKI, Tadeusz; STANCZYK,
Regina; NARUSZEWICZ, Danuta

Vaccination in Poland with a live attenuated vaccine against
poliomyelitis. Med.dosw.mikrob. 12 no.1:1-14 '60.

1. Z Zakladu Zirusologii P.Z.H.
(POLIOMYELITIS immunol.)
(VACCINES)

PRZHEROVSKIY, K., prof.

Seventh International Congress on Mud Research. Vop. kur., fizioter.
i lech.fiz. kul't. 27 no.1:71-73 '62. (MIPA 15:5)

1. Direktor Nauchno-issledovatel'skogo bal'neologicheskogo instituta
v Prage, Chekhoslovatskaya Sotsialisticheskaya Respublika.
(BATHS, MOOR AND MUD) (PEAT)

PRZHESETSKIY, O.P. [Przhesets'kyi, O.P.]

General and regional classification of landslides. Geol. zhur. 20
no. 3:101-103 '60. (MIRA 14:4)
(Landslides)

SHCHEDROV, V.G., doktor tekhnicheskikh nauk, professor; PRZHESMITSKIY, V.I.

"Demons of time". Znan.sila 32 no.6:20-26 Ja '57. (MIRA 10:8)
(Graviatation) (Flying machines)

PRZHESTAL'SKIY, S.M.

Function of the accumulation $M = f(t)$ during the diffusion in biological processes. Biofizika 10 no.2:363-365 '65. (MIRA 18:7)

1. Kafedra fiziki Vysshey sal'skokhozyaystvennoy shkoly, Vrotslav, Pol'sha.

PRZHETSLAVSKIY, V.L.

Research on the process of the beneficiation of various materials
in a fluidized bed. Gor. zhur. no.6:65-66 Je '61. (MIRA 14:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh
stroitel'nykh materialov, Moskva.
(Ore dressing) (Fluidization)

PRZHETSLAVSKIY, V.L., inzh.

Improving the properties of porous aggregates for concrete
by beneficiation. Stroi. mat. 8 no.6:19-22 Je '62. (MIRA 15:7)
(Aggregates (Building materials))
(Lightweight concrete)

TARANENKO, I.T.; GUDOK, V.V.; PRIZETSLAVSKIY, V.L.; VINOGRADOVA, N.H.

Exchange of experience. Zavilab. 38 no 4 469 162, (MIRA 13-5)

1. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorsko-
tekhnologicheskii institut asbestovykh tekhnicheskikh
izdeliy (for Taranenko, Gudok). 2. Vsesoyuznyy nauchno-
issledovatel'skiy institut novykh stroitel'nykh materialov
(for Prizetlavskiy, Vinogradova).

(Latex)

(Building materials Testing)

PRZHETSLAVSKIY, V.L., inzh.

Fractional analysis according to volume weight and estimating the
degree of homogeneity of porous aggregates. Stroi. mat. 7 no.4:
33-34 Ap '61. (MIRA 14:5)

(Aggregates (Building materials))

KLEBANOV, M.A., prof., ABERNMAN, A.A., KSHANOVSKIY, S.A., PRZHEVAL'SKAYA, L.A.
REVUL', R.M.

Causes of failure and outcome of prolonged antibacterial therapy
of cavernous pulmonary tuberculosis [with summary in French].
Probl.tub. 36 no.6:16-28 '58 (MIRA 11:10)

1. Iz Ukrainskogo instituta tuberkuleza imeni F.G. Yanovskogo (dir.
dots. A.S. Mamolat).

(TUBERCULOSIS, PULMONARY, ther.

chemother. in cavitation, causes of failure (Rus)))

KAPLYANSKIY, A. A.; PRZHEVUSKIY, A. K.

Deformation splitting of lines in the spectra of alkaline earth fluoride crystals activated with Sm and Eu divalent ions. Opt. i spektr. 13 no.6:882-884 D¹⁶².
(MIRA 16:1)

(Alkaline earth fluoride crystals—Spectra)
(Samarium) (Europium)

REDAVALLI, Y.A.

Deceased

Analytical Chemistry

See ILC

FRIDELVOLTSKAYA, G. M.

"Chemical Reactions of Intermetallic Phases:
Disintegration of Intermetallic Compounds
 Ag_3Al_3 and Mg_2Pb ," Zhur. Obshch. Khim., 19, No. 5, 1949.
Ukr. Lvov State Univ. I. Franko, -c1949-.

PRZHEVLOTSKAYA, S.M.

✓ Reciprocal Solubility in the ternary system formamide-diethylformamide-benzene. S. M. Przhelotskaya and G. E. N. Vasenko (Polytech. Inst., Lvov). *Dokl. Akad. Nauk SSSR*, 20, 631-4 (1954) (in Russian).—Reciprocal sol. of a ternary system, HCONH_2 - HCONEt_2 - C_6H_6 , was studied at 25° by isothermal titration. The area of layer sepn. is very small; this points to a good homogenizing action of HCONEt_2 . When the compn. is expressed in molar percentage, the binodal curve is sym., the crit. point of soln. being almost at the max. of this curve. The direction of the "conode" is almost exactly parallel to the base of the triangle. The solutropy phenomenon was not observed. Cf. Wehn and Franke, *C.A.* 44, 2289d. E. Barabash

OK
Met

L 42900-66 EWT(m)/EWP(t)/ETI IJP(c) JD/JW/JG

SOURCE CODE: UR/0051/66/020/006/1045/1057

ACC NR: AP6018445

AUTHOR: Kaplyanskiy, A. A.; Przhevuskiy, A. K.

ORG: none

TITLE: A piezospectroscopic analysis of the energy levels and transitions in Sm ions in crystals of alkali earth fluorides

SOURCE: Optika i spektroskopiya, v. 20, no. 6, 1966, 1045-1047

TOPIC TAGS: alkali earth, fluoride, absorption band, luminescence, electron oscillation

ABSTRACT: The effects of elastic monoaxial compression on a number of lines in MeF_2 - Sm spectra were examined at 77°K and 4.2°K [Me=Ca, Sr, Ba]. The single crystals were compressed monoaxially along $\langle 100 \rangle$, $\langle 111 \rangle$, and $\langle 110 \rangle$. The obtained spectra were photographed by a DAS-1 diffraction spectrograph with a dispersion up to 1.0 Å/mm. An analysis of the spectroscopic splitting observed during deformation revealed the symmetry of levels $4f^6$ and the lower levels $4f^55d$. It was found that latent levels $4f^55d$ appear in the spectra of stressed crystals upon the rise of luminescence of the forbidden lines. The splitting of f - d lines (which are of an electrical dipole nature) exceeds the splitting of f - f lines (which have a magnetic dipole nature) approximately by one order of magnitude. This phenomenon results from the greater sensi-

UDC: 535.34 + 535.37 : 548.0.092

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ACC NR: AP6018445

2
vity of the $4f^{5d}$ levels to variations in the field, as compared to the sensitivity of the levels of the screened $4f^6$ shell. Obviously, there exists a symmetrical static distortion of the grid near Sm^{++} brought about by the difference between the atomic radii of Sm^{++} and of Me^{++} . A peculiar phenomenon is the absence of spectroscopic splitting and mixing of the $4f^{5d}$ levels when $P \parallel \langle 111 \rangle$, where P = the axis of compression. This is caused by the participation of the e -states of the electron in the formation of $4f^{5d}$; the wave function of the e -states may be rendered as symmetrized sums of products of the f - and e -functions. A classification system of the electron oscillation structure of the f - d absorption bands of $\text{MeF}_2\text{-Sm}^{++}$ is presented. The authors thank Ye. F. Gross and P. P. Feofilov for their interest in the work. Orig. art. has: 2 formulas, 7 figures.

SUB CODE: 20/

SUBM DATE: 20Feb65/

ORIG REF: 014/

OTH REF: 011

Card 2/2 *ldh*

L 2406-66 EWP(e)/EWT(m)/EWP(i) WH

ACCESSION NR: AP5024753

GE/0030/65/011/002/0629/0634

AUTHOR: Kaplyanskii, A. A.; Przhevuskii, A. K.

TITLE: The strain-induced splitting of the U-band and the Jahn-Teller effect in the excited 4T_2 -state of Cr^{3+} ions in ruby ✓

SOURCE: Physica status solidi, v. 11, no. 2, 1965, 629-634

TOPIC TAGS: ruby, elastic strain, triplet splitting, Jahn Teller effect, absorption band

ABSTRACT: An investigation was made of the effect of uniaxial elastic strain on the 597 nm pure electronic line in the U-band (${}^4A_2 \rightarrow {}^4T_2$) of Cr^{3+} in ruby. The general features of the triplet splitting of the line by stress observed in the experiments were in good agreement with the phenomenological calculation for lines of low-symmetry (C_1) centers in a D_{3d} lattice. This suggests that the C_3 site symmetry of Cr^{3+} ions in the Al_2O_3 lattice is destroyed, and supports the hypoth-

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L 2406-66

ACCESSION NR: AP5024753

esin of the existence of the Jahn-Teller effect in the excited T_2 -
state of Cr^{3+} in ruby. Orig. art. has: 4 figures and 1 formula. [CS]

ASSOCIATION: Leningradskiy fiziko-technicheskiy institut im. Akademika
A. F. Ioffe (Leningrad Physicotechnical Institute)

SUBMITTED: 05Jul65

ENCL: 00

SUB CODE: SS

NO REF SOV: 003

OTHER: 010

ATD PRESS: 4101

PC

Card 2/2

L 3939-66 EWT(m)/EPF(c)/EWP(t)/EWP(b) IJP(c) JD/JW/JG
 ACCESSION NR: AP5025304

UR/0051/65/019/004/0597/0610
 535.37+535.34:548.0

AUTHOR: Kaplyanskiy, A. A.; Przhevuskiy, A. K.

TITLE: Deformation splitting and an increase in intensity of spectral lines and the structure of excited levels of Eu^{2+} in alkaline earth fluorides

SOURCE: Optika i spektroskopiya, v. 19, no. 4, 1965, 597-610

TOPIC TAGS: elastic deformation, luminescence absorption, line splitting, fluoride

ABSTRACT: An investigation was made of the effect of the elastic deformation of $\text{CaF}_2:\text{Eu}^{2+}$ and $\text{SrF}_2:\text{Eu}^{2+}$ on their absorption and emission lines corresponding to transitions between the ground state of Eu^{2+} $8_{1/2}(4f^7)$ and the lowest excited states $4f^65d$. Elastic deformation caused splitting of the lines due to allowed transitions and an increase in the intensity of forbidden lines. The effects observed were interpreted, using the perturbation theory, on the basis of the effect of deformation on the system of neighboring levels. The symmetry of these levels was determined by this method. The experimental data obtained were used to analyze the system of levels of the mixed configuration $4f^65d$ of Eu^{2+} in MeF_2 . The structure of the vibration spectra of f-d luminescence in $\text{MeF}_2:\text{Eu}^{2+}$ was also analyzed. Orig. art. has: 6 figures, 4 tables, and 1 formula. [CS]

Card 1/2

L 3939-66

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44 1950

AUTHORS: Kaplyanskiy, A.A., and Przhhevskiy, A.K.
TITLE: Deformation splitting of lines in the spectra of
alkali-earth fluoride crystals activated by Sm and
Eu divalent ions

PERIODICAL: Optika i spektroskopiya, v.13, no.6, 1962, 882-884

TEXT: The piezo-spectroscopic effect on the spectral lines
of Sm^{2+} and Eu^{2+} in MeF_2 is described. Spectra for uniaxial
compression along the axes of symmetry C_4 , C_3 , C_2 for single
crystals at 77 °K and 4.2 °K are investigated in directions normal
to the axis of compression P in polarised light, with vectors
 $E \parallel P$ and $E \perp P$ (compressive force is 10 kg/mm²). In the case
of $\text{MeF}_2\text{-Sm}^{2+}$ (using $\text{SrF}_2\text{-Sm}^{2+}$) the magnitude of the splitting is
markedly different for lines connected with $f\text{-}f$ and $f\text{-}d$
transitions. A symmetrical series of levels of Sm^{2+} is
determined in the field O_h permitting a comparison of the f^6
with levels of the free ions ($5D_0$, $7F_0$, $7F_1$). These results
compare well with the literature. In the case of $\text{MeF}_2\text{-Eu}^{2+}$
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PRZHEZDETSKAYA, I.K.

Clinical picture of phlebogenic sciatica. Sov.med. 22 no.9:98-100
S'58 (MIRA 11:11)

1. Iz kafedry nervnykh bolezney (zav. - prof. A.I. Zlatoverov)
Kuybyshevskogo meditsinskogo instituta.
(THROMBOPHELEBITIS, compl.
ischalgia (Rus))

PRZHEZDETSKAYA, I. K.

Cand Med Sci - (diss) "Veins of the bones of the human foot."
Kuybyshev, 1961. 16 pp; (Sverdlovsk State Medical Inst); 280
copies; price not given; (KL, 5-61 sup, 205)

KAPLYANSKIY, A.A.; MOSKVIN, N.A.; PRZHEVUSKIY, A.K.

Band splitting in the luminescence spectra of anisotropic centers
in LiF and CaF_2 -Eu crystals subjected to oriented deformation.

Opt. i spektr. 10 no.3:368-373 Mr '61. (MIRA 14:8)

(Calcium fluoride--Spectra) (Lithium fluoride--Spectra)

(Dislocations in crystals)

KAPLYANSKIY, A.A.; PRZHEVUSKIY, A.K.

Piezoelectric spectroscopic effect in ruby crystals. Dokl.
AN SSSR 142 no.2:313-316 Ja '62. (MIRA 15:2)

1. Fiziko-tekhnicheskiy institut im. A.F.Ioffe AN SSSR.
Predstavleno akademikom B.P.Konstantinovym.
(Piezoelectricity)
(Rubies--Spectra)

32833

S/020/62/142/002/011/029
B104/B138

9,2576 (1055, 1158, 1163, 1532)

AUTHORS: Kaplyanskiy, A. A., and Przhevuskiy, A. K.

TITLE: Piezospectroscopic effect in ruby crystals

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 2, 1962, 313-316

TEXT: The luminescence and absorption centers of ruby were investigated by examining the effect of oriented elastic deformations on the spectra of synthetic ruby crystals containing 1.6% Cr and having the shape of stretched rectangular parallelepipeds. The crystals were longitudinally pressed at 77°K. Compression was either parallel to the optical axis ($P||C_3$) or perpendicular to the basal plane of the crystal ($P\perp C_3$). In the latter case, both $P||C_2$ and $P\perp C_2$ hold. L/P. holds, L being the direction of observation. Uniaxial compression displays strong reversible effects on all of the absorption and luminescence spectra of ruby. The nature of the effect on the various lines differs and greatly depends on the direction of P. At $P||C_3$ the symmetry remains unchanged, and occurs only a shift of lines. At $P\perp C_3$ the symmetry is disturbed. The lines are shifted

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B104/B138

Piezospectroscopic effect ...

and split up. The shift and splitting of the R and B lines, as well as of the N_1 and N_2 lines are discussed in detail. The results discussed in the present paper were reported to the X Vsesoyuznoye soveshchaniye po luminesentsii, Moskva (10th All-Union Conference on Luminescence, Moscow) in June, 1961. Ye. F. Gross is thanked for interest, and Yu. Ye. Svetlov for discussions. There are 3 figures, 1 table, and 13 references: 8 Soviet and 5 non-Soviet. The three references to English-language publications read as follows: A. L. Shawlow, D. L. Wood, A. M. Clogston, Phys. Rev. Lett., 3, 271 (1959); S. Sugano, Y. Tanabe, J. Phys. Soc. Jap., 13, 880 (1958); J. B. Wachtman jr., W. Tefft et al., J. Res. Nat. Bur. Stand., 64A, 213 (1960).

ASSOCIATION: Fiziko-tekhnicheskii institut im. A. F. Ioffe Akademii nauk SSSR (Physicotechnical Institute imeni A. F. Ioffe of the Academy of Sciences USSR)

PRESENTED: July 31, 1961, by B. P. Konstantinov, Academician

SUBMITTED: July 31, 1961

Card 2/2

WIERZBIŃSKI, Leopold; KUMBIŃSKI, Kazimierz; PIKUSIŃSKI, Kazimierz

Application of radioisotopes in studies on the flow of hydromixtures.
Archiw górnicze no. 1: 91-106 '65.

1. Department VI in Krakow, of the Institute for Nuclear Research
and Institute of Nuclear Engineering of the School of Mining and
Metallurgy, Krakow. Submitted February 26, 1964.

PRZHIALKOVSKIY, V.

In the interests of U.S.monopolies. Kryl.rod. 11 no.10:27 0 '60.

(United States--Armaments) (MIRA 13:11)

FROM: [illegible], W.

Florida, the new center of rocket building in the U.S.A. Kryl.
no. 13 no. 3131 Mr '62. (MIRA 18:5)

PRZHIALKOVSKIY, V

In the service of monopolies. Kryl. red. 12 no. 9:30 S '61.
(MIRA 14:9)
(United States--Aeronautics)

PRZHIALKOVSKIY, Veniamin Ignat'yevich; PAVLOV, A.G., red.; ROMANOVA, N.I.
tekhn. red.

[Airplane and rocket industry of the U.S.A.] Aviatsionno-raketnaia
promyshlennost' SShA. Moskva, Izd-vo In-ta mezhdunarodnykh otnoshenii,
1961. 229 p. (MIRA 14:12)

(United States--Airplane industry)

(United States--Rockets (Aeronautics))

PRZHIALKOVSKIY, V.I.

Location of the aviation industry of the U.S.A. Vest. Vozd.
Fl. 41 no.12:83-88 D '58.

(MIRA 11:12)

(United States--Airplane industry)

PREHIBII, Al. [Pribyl, Al.] (Prague)

A new species of the genus Paracyclas Hall from the Silurian period in Bulgaria. Spis Bulg geol družh 25 no.3:304-307 '64.

BIDULYA, P.N., PRZHIBYL, I., TELIS, M.Ya., FOKIN, G.F., SOSNENKO, M.N.,
POZDNYISHEV, V.M., SOROKIN, A.I.

"Special methods of casting" by S. IA. Golovin. Reviewed by
P.N. Bidulia and others. Lit. proizv. no.6:3 of cover Je '60.
(MIRA 13:8)

(Founding)
(Golovin, IA.)

PRZHIBYL, I.

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(MIRA 13:5)

(Iron founding)

PRZHIBYL, Iozef [Přibyl, Josef], doktor-inzhener; IVANOV, Ye.V., inzhener.
[translator]; BIDULYA, P.N., doktor tekhnicheskikh nauk, redaktor;
GRUSHEVSKAYA, G.M., redaktor izdatel'stva; MATVEYEVA, Ye.N.,
tekhnicheskiiy redaktor

[Solidification and feeding of castings. Translated from the Czech]
Zatverdevanie i pitanie otlivok. Perevod s cheshskogo E.V.Ivanova.
Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957.
286 p. (MLBA 10:7)

1. Zaveduyushchiy kafedroy "Liteynoe proizvodstvo v Gorno-
metallurgicheskoy institute v Ostrave (for Przhibyl)
(Steel castings)

PRZHIBYL'SKAYA, Ya.I.

Significance of studying the optic functions of the organ
of vision in its traumas. Uch.zap. UEIGB 5:172-180 '62
(MIRA 16:11)